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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WOO, ISAAC M

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 05/07/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/684,907

Applicant(s)

THOMPSON ET AL.

Examiner

Isaac M Woo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 21-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-24 and 28-30 is/are allowed.
- 6) ☒ Claim(s) 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to Applicant's amendments filed on March 17, 2004 have been considered but are deemed moot in view of new ground of rejections below for claims 25-26.

2. The claim 21, 25 and 27-28 are amended. And the pending claims are 21-30.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fohn et al (U.S. Patent No. 6,076,091, hereinafter, "Fhon").

With respect to claim 25, Fhon discloses, requesting a product type, see (7.1-4, fig. 7, col. 14, lines 41-67, user selects products, fig. 11) prompting a set of product-specific questions selected based on product type requested related to desired attributes of the products components, see (col. 1, lines 16-36, col. 5, lines 7-45, col. 8, lines 31-41); providing answers to product-specific questions as prompted including

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desired attributes of at least one product component, see (col. 1, lines 16-36, col. 5, lines 7-45, col. 8, lines 31-41); configuring the assembly product using frame-based inferences of a product component knowledge base in response to answers provided, see (fig. 8-11, col. 15, lines 1-67 to col. 16, lines 1-28); displaying line drawings of the assembly as configured, wherein the line drawing graphically depicts a type, size and style of the assembly as configured, see (fig. 8-11, col. 15, lines 1-67 to col. 16, lines 1-28), the assembly as configured and displayed, see (fig. 8-11, col. 15, lines 1-67 to col. 16, lines 1-28). Fhon discloses the assembly as configured and displayed (fig. 8-11, col. 15, lines 1-67 to col. 16, lines 1-28). Fhon does not disclose the quoting a price for the assembly. However, Fhon discloses, "product information such as the name, a text description of the product, and the price can be captured. However, for supporting more sophisticated interactions, additional product and merchandising information can be captured and incorporated into the catalog knowledge representation including associations between products within the catalog, attributes, and categorization information", see (col. 5, lines 8-45). This teaches the product price information is used for product assemble. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to include the quoting a price for the assembly in the system of Fhon to provide component price. Because the price of component for assembly can provide a user option to apply different price of component to put on design of product that provides modeling simulation and suggestion of knowledge of design.

With respect to claim 26, Fohn discloses, displaying composite units of the assembly as configured; allowing custom configuration of the assembly as configured by allowing addition and modification of composite units to the assembly as configured displayed, see (fig. 8-11, col. 15, lines 1-67 to col. 16, lines 1-28).

***Allowable Subject Matter***

5. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 21-24 and 28-30 are allowed over prior art. The following is a statement of reasons for the indication of allowable subject matter:

Due to claimed features in the amended claims 21 and 28, with applicant's persuasive arguments with amendment, the claims 21-24 and 28-30 are allowed.

For the claims 11 and 28, the prior art teaches (Sebastian et al, U.S. Patent No. 5,293, 479) system and method for the step of configuring a product, representing product component knowledge of a plurality of product component in a hierarchical structure, wherein the representing step includes storing product category information in frames in the form of nodes of the hierarchical structure and storing product features and options in slots for respective nodes of the structure, outputting a set of product-specific questions.

The prior art does not teach combination step of configuring product from a plurality of product components as follows:

The step of receiving individual answers to respective ones of the set of product-specific questions, removing at least one product-specific question from the output set of product-specific questions, prior to receiving an answer to the at least one product-specific question, in response to answered received, performing frame-based inferences of the product knowledge stored in the hierarchical structure based on answers received, and configuring a product with features and options based on the desired attributes of the at least one product component and based on inference made. The prior art does not teach, data storage system is repository of product knowledge of product components of type, style, size and attributes, the configurator subsystem builds product configurations based on data from the data storage subsystem and established data relationships, wherein the configurator includes a core module for facilitating input and output data in the system, and a frame engine for computing available configuration answers for any configuration questions posed to the user at any time, receiving values of answers received by the user interface and performing the values of answers to other questions automatically, and generating configuration data representing configuration of a desired product.

Claims 22-24 and 29-30, dependent claims having further limitations from the amended independent claims 21 and 28, are allowed with the same reasons above.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMW  
April 28, 2004

  
SHAHID ALAM  
PRIMARY EXAMINER